DETAILED ACTION

The preliminary amendments filed April 16, 2004 have been entered. Claims 11-46 and 48-92 have been cancelled. Claims 97-101 are newly added claims in the preliminary amendments.

Claims 1-10, 47, and 93-101 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-10, 47, and 93-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bialer et al. (US Patent 5,585,358, reference of record) and IE 0052415 ('415) in view of Hansen (Southern Medical Journal, 1999;92(7):642-649), McQuay et al. (BMJ, 1995;311:1047-1052), Shank et al. (US Patent 5,760,007), Carrazana et al. (US Patent 6,319,903), Magnus (Epilepsia, 1999;40(Suppl 6):S66-

S72), Zakrzewska et al. (Pain 1997;73(2):233-230), and Merck Manual (16th ed., 1992, page 1412), references of record in the parent application.

Bialer et al. teaches the elected compound, N-(2-n-propylpentanoyl) glycinamide, is useful as anticonvulsant for treating epilepsy and other neurological disorders (see the abstract, and col. 7, line 23-44, Example 1; col. 13, line 4 – col.17, line 34). Bialer et al. teaches the effective dose in a composition for N-(2-n-propylpentanoyl) glycinamide as 10 to about 500mg (col. 3, line 59-61). Bialer et al. also teaches the ED_{50} dosage of N-(2-n-propylpentanoyl) glycinamide for antiepileptic activities as 73mg/kg (about 5000mg in an 70kg adult) (See col. 13, line 39). Bialer et al. also teaches N-(2-n-propylpentanoyl) glycinamide can be administered through oral, intravenous, intraperitoneal, intramuscular, and topical (See col. 7, line 10-14). Bialer et al. also teaches those skilled in the art would be able to determine the precise effective amount and routes of administration of the herein compound to be administered (See col. 6, line 49-59).

‘415 teaches the compounds which encompassed by the compounds recite in claims 4-5 (See page 2, compounds of Formula (I), when R1 or R2 is alkyl phenyl or araalkyl). ‘415 also teaches the compounds have antiepileptic effect (See page 10 and 11).

The references do not expressly teach N-(2-n-propylpentanoyl) glycinamide and the compounds of ‘415 to be useful as treating or preventing acute, chronic, neuropathic pain, or cancer pain. The references do not expressly teach the dosage of N-(2-n-propylpentanoyl) glycinamide or that of the compounds of ‘415as 6000mg or 3000mg.

The references do not expressly teach the route of administration as intranasal, sublingual, inhalation, buccal, intravaginal, and pulmonary. The references do not expressly teach the dosing frequency of N-(2-n-propylpentanoyl) glycinamide or the compounds of '415 as periodic six times daily.

Hansen teaches various antiepileptic agents are useful in treating both acute and chronic pain (See page 642, col. 2, second paragraph, page 646, col. 2, fourth paragraph to page 647, whole page).

McQuay et al. teaches the effectiveness of various anticonvulsants such as carbamazeoine, phenytoin, Valproate sodium are effective in treating neuropathic pain such as trigeminal neuralgia, cancer pain, rheumatoid arthritis and migraine prophylaxis in various degree (See the abstract, Tables 1-4, also Section Trigeminal neuralgia and Migraine prophylaxis).

Shank et al. teaches topiramate, an anticonvulsant, is useful in treating neuropathic pain (See claim 2).

Carrazana et al. teaches topiramate, an anticonvulsant, is useful in treating cluster headaches (See claims 1-15).

Magnus teaches gapapentin, an anticonvulsant, is useful in treating neuropathic pain and useful in migraine prophylaxis (See Summary, also page S66 to S68, first col. Second paragraph; also page S71, Table 5).

Zakrzewska et al. teaches lamotrigine, an anticonvulsant, is useful in treating trigeminal neuralgia, a neuropathic pain. (See the abstract).

Merck Manual teaches that peripheral neuropathy pain is associated with tumor infiltration, which is a neuropathic pain (See page 1412).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ N-(2-n-propylpentanoyl) glycinamide or the compounds of '415, in the herein claimed dosage and dosing regimen, in a method of treating and prophylaxis pain. It would have been obvious to one of ordinary skill in the art at the time the invention was made to administer N-(2-n-propylpentanoyl) glycinamide or the compounds of '415 in the herein claimed routes of administration.

One of ordinary skill in the art would have been motivated to employ N-(2-n-propylpentanoyl) glycinamide or the compounds of '415, in the herein claimed dosage and dosing regimen, in a method of treating and prophylaxis pain. Based on the cited prior art, antiepileptic compounds with vastly different structure and mechanism of actions are useful for treating and preventing neuropathic pain, migraine headache and cluster headache. The only common property of these antiepileptic compounds is that they are all useful as anticonvulsant. Therefore, employing any known anticonvulsant, including the N-(2-n-propylpentanoyl) glycinamide, or the compounds of '415 would have been reasonably expected to be useful to treat or prevent neuropathic pain such as peripheral neuropathic pain associated with tumor infiltration, migraine headache and cluster headache. Furthermore, the optimization of result effect parameters (e.g., dosage range, dosing regimens) is obvious as being within the skill of the artisan, based on the teachings of Bialer et al. (See col. 6, line 49-59).

One of ordinary skill in the art would have been motivated to administer N-(2-n-propylpentanoyl) glycinamide or the compounds of '415in the herein claimed routes of administration because one of ordinary skill in the art would be charge to possess all the conventional method of administering a therapeutic compound. Selecting the herein claimed routes of administration over the obvious alternatives would be considered obvious as being within the purview of a skilled artisan, absent evidence to the contrary.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to San-ming Hui whose telephone number is (571) 272-0626. The examiner can normally be reached on Mon 9:00 to 1:00, Tu - Fri from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, PhD., can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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